REMARKS

The Office Action of August 30, 2010, has been carefully studied. Claims 1, 2, 6, 7, 9 and 12-17 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Claim Amendments

Claims 3, 8, 10 and 11 have been cancelled.

Claim 1 has been amended to delete the definition of Re and the phrase "the group may be substituted with one or two same or different substituents W."

New claims 14-17 recite treatment methods and replace claims 8, 10 and 11, which were originally presented in Japanese style to claim a compound for treating a particular condition or disease rather than as a method of treating.

Rejections under 35 U.S.C. 112

Claims 1-3 and 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is respectfully traversed.

Claim 1 has been amended to delete the definition of Re and the phrase "the group may be substituted with one or two same or different substituents W."

Claims 4, 8, 10 and 11 have been cancelled.

Claims 1-3 and 6-11 are rejected under 35 U.S.C. 112, first paragraph. The Examiner states that the specification is enabling only for the elected compound species. The Examiner states, "In the instant case, the Specification discloses various compounds and species which are Raf inhibitors (pages 324-325, Tables 4.1-4.3)." However, only 8 of the tested compounds are within formula I (i.e., compounds 4, 36, 57, 95, 96, 104 and 119).

This rejection is respectfully traversed.

It is respectfully submitted that the specification discloses test results for many more compounds. Table 4-1 at page 155 of the published application shows the Raf-1 enzyme inhibition activity of compounds 30, 36, 95, 96, 104 and 119 of Table 1, pages 9-38 of the published application. These compounds correspond to the compounds disclosed in Examples 30, 36, 95, 96, 104 and 109, and thus fall within the scope of the claim 1 as amended.

Table 4-2 shows the Raf-1 enzyme inhibition activity of compounds 8, 13, 25-28, 30, 40 and 57 of Table 2, pages 38-55 of the published application. These compounds correspond to the compounds described in Examples 130, 135, 147-150, 152, 162 and 179. All of these compounds fall within the scope of claim 1 as amended.

Table 4-3 shows the Raf-1 enzyme inhibition activity of compounds 71, 73, 78 and 91 of Table 2 and compounds 30, 31, 45 and 46 of Table 3, pages 56-66 of the published application. These compounds correspond to the compounds disclosed in Examples 188, 190, 195, 197, 227, 228, 242 and 243 of the specification, and all fall within the scope of claim 1 as amended.

Additionally, Tables 5-1 to 5-3 on page 156 of the published application show the results of a cell growth inhibition assay. In Table 5-1, compounds 35, 36, 49, 53, 95, 96, 104 and 119 of Table 1 correspond to the compounds disclosed in Examples 35, 36, 49, 53, 95, 96, 104 and 119 of the specification, and all of these compounds fall within the scope of amended claim 1.

In Table 5-2, compounds 19, 25, 42, 43, 46-48, 52 and 53 of Table 2 correspond to the compounds disclosed in Examples 141, 147, 164, 165, 168-170, 174 and 175. These compounds all fall within the scope of amended claim 1.

In Table 5-3, compounds 62, 74 and 76 in Table 2 and compounds 14, 28, 41, 46 and 48 of Table 3 correspond to the compounds disclosed in Examples 184, 191, 193, 211, 225, 238, 243 and 245 of the specification. These compounds all fall within the scope of amended claim 1.

Furthermore, the present specification describes an anti-tumor assay in Tables 6-1 and 6-2 on page 156 of the published application. These tables include the experimental results for compounds 36 and 119 of Table 1

and 25, 26 and 30 of Table 2, corresponding to the compounds disclosed in Examples 36, 119, 147, 148 and 152 of the present application.

It should be noted that the specification does not include test results for compounds 4 and 57.

It is respectfully submitted that the Examiner's assertion that the specification does not enable all of the compounds claimed is based upon an apparent misunderstanding of the application. Withdrawal of the rejection is respectfully requested.

Art Rejections

Claims 1-3 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al., WO 2003/0292099, particularly Example 29 at page 53 of Adams.

This rejection is respectfully traversed.

The Adams compounds are pyrazolo-pyrimidine derivatives. That is, the core of these compounds, including the compound in Example 29, is a 1H-pyrazolo[3,4]-dipyrimidine ring. Moreover, the phenylurea moiety of the compound of Example 29 links at the 2-position of the 1H-pyrazolo[3,4]-dipyrimidine ring as A. According to Adams, the compounds are useful in treating diseases associated with in appropriate angiogenesis (page 1, lines 5-9). More specifically, Adams discloses that the subject compounds are used to treat a disorder mediated by at least one of inapposite TIE-2, VEGR-2 and VEGR-3 knase activity.

The compounds claimed herein have been demonstrated to inhibit Raf kinase, which involves an important role in the growth of human cancer cells (see paragraph 0004 of the published application). Raf protein functions in the MAPK-ERK signal transduction pathway as part of a protein kinase cascade. This plays an important role in the control of gene expression involved in the cell division cycle, apoptosis, cell differentiation and cell migration. The effect of these compounds is described extensively in Tables 4-1 to 4-3, 5-1 to 5-3, 5-2 and 6-2 of the application. In contrast thereto, Adams does not disclose or suggest any effect on Raf inhibitory activity.

In determining obviousness of chemical compounds, "*a prima facie* case of obviousness requires structural similarity between claimed and prior art subject matter...where the prior art gives reason or motivation to make the claimed composition," *In re Dillon*, 915 F/2d 688, 692 (Fed. Cir. 1999) *en banc*. "Thus, in cases involving new chemical compounds it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner or establish *prima facie* obviousness of a new claimed compound," ***Takeda Chem. Indus. v. Alphapharm Pty., Ltd.*, 492 F.3d Fed. Cir 150, 1357, 2007.**

Since there is no indication that the Adams compounds have any effect on Raf kinase activity, there would be no reason for one skilled in the art to

modify the Adams compounds with any reasonable expectation that the modified compounds would have Raf-kinase-inhibiting activity. Therefore, it is respectfully submitted that one skilled in the art would not be able to arrive at the herein claimed compounds in light of the Adams disclosure.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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